UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,947	10/31/2005	Brian Russell Logan	4623-051371	1706
	7590 12/19/200 AW FIRM, P.C.	EXAMINER		
700 KOPPERS	BUILDING	EPPES, BRYAN L		
436 SEVENTH PITTSBURGH.	<del>-</del>		ART UNIT	PAPER NUMBER
,			3635	
			MAIL DATE	DELIVERY MODE
			12/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Applica	Application No. App		pplicant(s)			
		10/534	,947	LOGAN ET AL.				
		Examin	ier	Art Unit				
		BRYAN	EPPES	3635				
Period fo	The MAILING DATE of this commur or Reply	nication appears on t	the cover sheet	with the correspondence ac	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
	Responsive to communication(s) file	ed on 16 May 2005						
2a)□	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
3)		<i>'</i> —		tters, prosecution as to the	e merits is			
٥,١	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠	Claim(s) <u>1-19</u> is/are pending in the	application.						
,	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
· · · · · · · · · · · · · · · · · · ·	Claim(s) <u>1-19</u> is/are rejected.							
· ·	Claim(s) is/are objected to.							
•	Claim(s) are subject to restri	ction and/or electior	requirement.					
	on Papers		·					
	The specification is objected to by the	ne Evaminer						
•	•		nted or h) 🕅 ohi	ected to by the Examiner				
10)⊠ The drawing(s) filed on <u>16 May 2005</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
			-		.FR 1 121(d)			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
,—	ınder 35 U.S.C. § 119	, <u>-</u>						
	Acknowledgment is made of a claim	for foreign priority	indor 35 II S C	\$ 110(a) (d) or (f)				
•	X All b) Some * c) None of:	Tor Toreign priority t	inder 33 0.3.0.	g 119(a)-(u) or (i).				
مرار م	<i>'</i>	documents have b	een received					
	<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
	w. v							
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date								
3) \overline Inform	3) Information Disclosure Statement(s) (PTO/SB/08)							
Paper No(s)/Mail Date <u>4/17/2006</u> . 6)  Other:								

## **DETAILED ACTION**

This is a first office action on the merits for application serial number 10/534947 filed 5/16/2005. Claims 1-19 are pending.

# **Drawings**

- 1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims.
  - a. Therefore, the spike twisted about an axis as described in claim 15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
  - b. Therefore, the pressing station, including the pressing station having a female template, as described in claims 17-19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

Application/Control Number: 10/534,947 Page 3

Art Unit: 3635

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 1-4, 8-12, and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanford (U.S. Pat. 3,416,283).
  - a. Claims 1 and 16. Sanford discloses a metal connector 113 comprising upper 111 and lower 112 flanges each including a pair of timber members, the connector having two spatially separated attachment sections 126 that can be located between the timber members of each flange, wherein at least one of the attachment sections 126 has a plurality of spikes 128 projecting outwardly from opposite sides capable of fastening one pair of timbers to the connector to form the flanges of a beam (Figs. 13 and 15).

Application/Control Number: 10/534,947 Page 4

Art Unit: 3635

b. Claim 2. Sanford discloses the metal connector wherein each attachment section 126 has spikes 128 projecting outwardly from each side for piercing and fastening pairs of timber members (Fig. 15).

- c. Claim 3. Sanford discloses the metal connector wherein the spikes 128 are provided by tabs made in the attachment section 126 and interconnected by bending interconnecting portions (Figs. 15 and 7).
- d. Claim 4. Sanford discloses the metal connector wherein the interconnection portion of spikes 128 projecting outwardly from one side of the attachment section 126 are adjacent the interconnecting portion of spikes 128 that project outwardly from the opposite side (Figs. 14 and 15).
- e. Claim 8. Sanford discloses the metal connector wherein the spikes 128 are arranged in rows and ranks, interpreted as described by applicant (i.e. diagonally), on the attachment section 126 such that adjacent interconnecting portions of the spikes from opposite sides of the attachment section 126 are in different ranks (Figs. 14 and 15).
- f. Claim 9. Sanford discloses the metal connector wherein the ranks are arranged diagonally such that the interconnecting portions of the spikes 128 in one rank are adjacent interconnecting portions of spikes 128 in another rank (Fig. 14).
- g. Claim 10. Sanford discloses the metal connector wherein the rows and ranks are defined by a plurality of pairs of spikes 128 projecting outwardly from the attachment section 126 (Figs. 14 and 15).

Application/Control Number: 10/534,947

Art Unit: 3635

h. Claim 11. Sanford discloses the metal connector wherein the rows and ranks are defined by pairs of spikes 128 projecting from one side of the attachment section 126 and adjacent ranks have pairs of spikes 128 projecting outwardly from opposite sides of the attachment section 126 (Figs. 14 and 15).

Page 5

- i. Claim 12. Sanford discloses the metal connector wherein the length of the spike 128 is 10mm, described as 3/8" (Col. 4 Lines 30-31).
- j. Claims 14 and 15. Sanford discloses the metal connector wherein the spike 128 is twisted about an axis lateral to the attachment section 126 to prevent the timber from separating from the spike 128 (Col. 4 Lines 58-69).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 5, 6, 7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanford (U.S. Pat. 3,416,283).
  - k. Claims 5, 6, 7, and 13. Sanford discloses all the limitations of the invention as described above, but lacks a specific disclosure of claimed dimensions. However, the claimed dimensions, absent a disclosed criticality, are viewed as a choice of design which would have been obvious, at the time of the invention, to one having ordinary skill in the art as it involves nothing other than

Application/Control Number: 10/534,947

Art Unit: 3635

routine experimentation to determine optimal dimensions and there is no unpredictable or unexpected result achieved. Further, it is well known in the art to use a properly dimensioned apparatus in order to avoid unwanted failure of said apparatus.

Page 6

- 3. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanford (U.S. Pat. 3,416,283) in view of Jureit (U.S. Pat. 4,157,676).
  - I. Claims 17 and 18. Sanford discloses the connector as described above, but lacks details on the method of manufacture. Jureit teaches it is known to use a press for constructing structural members, specifically structural members including sandwiched plate connectors (Jureit Fig. 6). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to assemble the structural support member of Sanford using a press, as taught by Jureit, as a known means of assembling members using plate connectors without any new or unexpected results. The use of a press, as modified by Jureit, would necessarily entail the steps of positioning the connector between the timbers in the press and applying force for both connection sections.
  - m. Claim 19. Sanford discloses the connector as described above, but lacks details on the method of manufacture. Jureit teaches it is known to use a press for constructing structural members, specifically structural members including sandwiched plate connectors (Jureit Fig. 6). However, Jureit lacks wherein the press includes a female template receiving the connector spikes. Nevertheless, it would have been obvious to one of ordinary skill in the art to modify the press

of Jureit with apertures for receiving connector spikes so as not to flatten the spikes when installed on a single layer of timber. This is extremely useful when constructing the member in layers (i.e. connecting the first layer of timber before sandwiching a second layer) so as to provide an ample opportunity for precision alignment of all the components. The use of a template having the inverse shape of the object being pressed is notoriously well known in the art of fabrication via presses as a known means of increasing the pressed surface area. Furthermore, the combination would not yield any new or unexpected results.

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN EPPES whose telephone number is (571)270-3109. The examiner can normally be reached on M-F; alt. Fri. off (7:30am-5pm EST.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/534,947 Page 8

Art Unit: 3635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./ Supervisory Patent Examiner, Art Unit 3635

/B. E./ Examiner, Art Unit 3635